



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2011-0770; FRL-9928-16-Region 8]

Approval and Promulgation of Implementation Plans; State of Colorado; Regional Haze State Implementation Plan

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is reissuing its final approval of the Colorado regional haze State Implementation Plan (SIP) revision submitted on May 25, 2011 with respect to the State's best available retrofit technology (BART) determination for the Comanche Generating Station (Comanche) near Pueblo, Colorado. EPA originally finalized its approval of the Colorado regional haze SIP on December 31, 2012. In response to a petition for review of that final action in the United States Court of Appeals for the Tenth Circuit, EPA successfully moved for a voluntary remand, without vacatur, to more adequately respond to public comments concerning Comanche. EPA is providing new responses to those comments in this rulemaking notice.

DATES: This final rule is effective on **[Insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-R08-OAR-2011-0770. All documents in the docket are listed on the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Air Program, Environmental Protection Agency (EPA), Region 8, 1595 Wynkoop Street, Denver, Colorado 80202-1129. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding federal holidays.

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I. Background

On March 26, 2012, EPA proposed to approve the Colorado regional haze SIP as meeting the applicable requirements of Sections 169A and 169B of the Clean Air Act (CAA) and EPA's implementing regulations at 40 CFR 51.308-309 (Regional Haze Rule) and 40 CFR

Part 51, Appendix Y (Best Available Retrofit Technology (BART) Guidelines).¹ Among the components of the SIP was a nitrogen oxides (NO_x) BART determination for Units 1 and 2 at Comanche. As with several other facilities, the State submitted a BART analysis for Comanche that took into account the five factors required by section 169A(g)(2) of the CAA. The State determined that the existing emission controls at Comanche Units 1 and 2, low-NO_x burners with over-fire air (LNB/OFA), are BART. EPA proposed to approve the State's NO_x BART determination for Comanche.

EPA received several adverse comments on its proposed approval, including comments from WildEarth Guardians (Guardians) and the National Parks Conservation Association (NPCA). On December 31, 2012, EPA published a notice of its final approval of the Colorado regional haze SIP.² That final action included an approval of the Comanche NO_x BART determination.

On February 25, 2013, NPCA and Guardians filed petitions seeking the Tenth Circuit's review of EPA's final approval of the Colorado regional haze SIP.³ Guardians challenged EPA's approval of Colorado's BART determinations for Units 1 and 2 of the Craig Station; Units 1 and 2 of the Comanche Station; and Boilers 4 and 5 of the Colorado Energy Nations Company (CENC), LLP facility at the Coors Brewery. Guardians also challenged EPA's approval of Colorado's reasonable progress determination for Craig Unit 3, and the deadlines for compliance with emission limits for the units at all three facilities. NPCA challenged only EPA's approval of Colorado's BART and reasonable progress determinations for Craig Units 1, 2, and 3. After the court consolidated the cases for review, EPA reached a settlement with

¹ 77 FR 18052.

² 77 FR 76871.

³ See *WildEarth Guardians v. EPA*, No. 13–9520 (10th Cir.) and *National Parks Conservation Association v. EPA*, No. 13–9525 (10th Cir.).

NPCA and Guardians concerning their claims related to the Craig Station,⁴ and Guardians elected not to pursue its claims regarding CENC/Coors. Guardians' claims concerning the Comanche Station are still active. In response to these claims, EPA moved the court for a partial voluntary remand of its 2012 final approval without vacatur so as to provide a more detailed and complete response to some of the adverse comments on the proposed approval.⁵ The court granted EPA's motion.⁶

II. Public Comments and Revised EPA Responses

We received adverse comments on our proposed approval of the Colorado regional haze SIP, including comments from Guardians related to our proposed approval of Colorado's BART determinations for Units 1 and 2 at the Comanche Station. We are reissuing our final approval of the Colorado regional haze SIP with respect to Comanche to provide more detailed and clearer responses to the Comanche-related adverse comments. The responses below contain our complete, updated, and clarified responses to comments related to the Comanche NO_x BART determination.

Comment: The commenter argues that Comanche Units 1 and 2 are currently meeting lower NO_x emission rates than the State's BART emission limits that EPA proposed to approve. The commenter cited the State's BART analysis, noting that currently Unit 1 is emitting at an average annual rate of 0.124 lb/MMBtu and Unit 2 is emitting at an average annual rate of 0.165 lb/MMBtu, and compares those rates to the Colorado BART limits: a 30-day emission rate of 0.20 lb/mmBtu, and a combined annual average emission rate of 0.15 lb/mmBtu. According to the commenter, allowing these units to emit more pollution than they currently emit does not

⁴ See Proposed Settlement Agreement, 79 FR 47636 (Aug. 14, 2014).

⁵ See Respondents' Motion for Partial Voluntary Remand Without Vacatur and to Stay Briefing Schedule Pending Resolution of This Motion, filed Sep. 19, 2014 in *WildEarth Guardians v. EPA*, No. 13-9520 (10th Cir.).

⁶ See Order filed Oct. 6, 2014 in *WildEarth Guardians v. EPA*, No. 13-9520 (10th Cir.).

represent BART and would not lead to visibility improvements, and nothing in the CAA or EPA's regulations suggests that it is appropriate for BART limits to include any such cushion. Further, the commenter alleges that that under the annual BART limits, NO_x emissions will be allowed to increase by at least 14 tons per year (tpy), and that the 30-day rolling average limits would allow Unit 1 to emit at least 40% more NO_x than the baseline 30-day rolling average peak and Unit 2 to emit 12% more NO_x. The commenter claims that the data demonstrates that Unit 1 could meet a 30-day rolling average NO_x emission limit of 0.15 lb/MMBtu and Unit 2 could meet a limit of 0.18 lb/MMBtu without any trouble, and that the BART limits should reflect what is achievable. Accordingly, the commenter asserts that EPA must disapprove Colorado's NO_x BART determinations for Comanche Unit 1 and Unit 2 and adopt a FIP that establishes BART limits that represent actual emission reductions.⁷

Response: We disagree with this comment. The State set NO_x BART emission limits for Comanche Units 1 and 2 individually at a 30-day rolling average emission rate of 0.20 lb/MMBtu and a combined annual average emission rate of 0.15 lb/MMBtu. As EPA requested in our October 26, 2010 comment letter during the state public comment process, the State considered tightening the 30-day limits, but ultimately chose not to do so. In EPA's judgment, the State could have better explained the basis for the margin for compliance, but a more robust analysis would not have led it to reach a different conclusion as to the Comanche NO_x BART limits. Further, if we were to disapprove the SIP and promulgate a FIP with lower emission limits, the actual emissions from Comanche would unlikely be significantly lower. We therefore decline to disapprove the NO_x BART determination for Comanche.

⁷ Comments submitted by WildEarth Guardians (hereinafter referred to as "Guardians' Comments") at 5-6, EPA-R08-OAR-2011-0770-0040 Attachment 2 (May 25, 2012)

In our October 26, 2010 comment letter to the State, we asked Colorado to evaluate tightening Comanche's NO_x limits. The State conducted that evaluation.⁸ Based on its experience, and after reviewing other state BART proposals, Colorado found that 30-day rolling average NO_x emission rates could be expected to be up to approximately 15% higher than annual average emission rates. With this in mind, and also considering uncertainty regarding load fluctuations, cold-weather operating, startup, and increased cycling to back up renewable energy generation, the State concluded that a 0.20 lb/MMBtu 30-day rolling average emission limit was appropriate for both units.

As a general matter, EPA finds it appropriate and reasonable to allow a margin for compliance in setting 30-day rolling average BART limits, and we have approved other state BART determinations that included such margins. The shorter 30-day averaging period results in higher variability in emissions because of load variation, startup, shutdown, and other factors. Accordingly, we have not generally required that 30-day rolling average emission limits be equal to the annual emission rates used for calculating cost-effectiveness. We find the State's application of a margin for compliance here consistent with that approach.

The compliance margin included for the Comanche units is larger than we would generally expect. But we find that with respect to Comanche, the compliance margin is unlikely to lead to significant actual NO_x emissions increases. After all, the lower Comanche emissions cited by the commenter occurred under permit limits identical to those the State selected as BART, and the commenter has provided no evidence that the facility will change its operations

⁸ See Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, at 17–19 (EPA-R08-OAR-2011-0770-0013, PDF pages 312–14); *see also* Appendix C — Technical Support Documents for BART Determination (EPA-R08-OAR-2011-0770-0017), Attachment 5: Public Service Company — Comanche Station Units 1 and 2 Technical Analysis.

just because the State has adopted the permit limits as BART limits. Instead, emission rates are likely to remain near the baseline figures cited by the commenter, which as the commenter notes are below the BART limits. An occasional rise is possible in light of the uncertainties referred to above, which is the purpose of allowing a margin for compliance above the actual 30-day rolling average emissions levels. The commenter appeared to at least partly acknowledge this reality, stating that “[w]e do not suggest that the State was required to set the emission limits exactly at the levels emitted.”⁹ But none of these uncertainties suggests that there will be a consistent increase in emissions over the long term.

As for annual average emission rates, Colorado found that in 2009, the annual average rate for both units combined was about 0.15 lb/MMBtu. Colorado did not propose applying a margin of compliance to the 2009 annual average rate, and set a limit at 0.15 lb/MMBtu. Because short-term emissions increases and decreases should average out over the course of any single year, we believe that setting the BART annual emission limit at about the annual emission rate from 2009 is reasonable, unless there is evidence that the source was not properly operated in 2009 or that annual average source operating conditions in 2009 were unrepresentative of future operations. The commenter has not alleged that there is any such evidence. The commenter does assert that the 0.15 lb/MMBtu annual limit would allow an increase in actual emissions if both units operate at the BART limit. The potential emissions increase calculated by the commenter, however, would only be 14 tons of NO_x per year. A 14-ton increase is not significant when compared to the annual NO_x emissions of approximately 3,860 tons from Comanche Units 1 and 2; it does not warrant disapproval and a subsequent FIP.¹⁰

⁹ Guardians’ Comments at 8.

¹⁰ Discussing state flexibility to exempt *de minimis* emission levels from a BART analysis, the BART Guidelines make a similar point: “If a State were to undertake a BART analysis for emissions of less than 40 tons of SO₂ or

The commenter alleges, but does not support or quantify, a “likely” further increase (beyond the claimed 14-ton increase) based on the potential for one unit to exceed 0.15 lb/MMBtu while the combined rate remains below that limit. This comment appears to be referring to a scenario in which the unit operating above 0.15 lb/MMBtu would have a higher heat input than the unit operating below 0.15 lb/MMBtu, so that together they would still comply with the SIP’s 0.15 lb/MMBtu average emission rate limit while having higher emissions than if each unit were held to a limit of 0.15 lb/MMBtu. With the existing LNB/OFA controls, though, neither unit can be operated at an emission rate much below its current emission rate, and so there is unlikely to be “room” for the other unit to operate much higher while still meeting the combined emission limit. Also, the two units are subject to very similar physical limits on heat input.¹¹ We therefore find that any additional emissions consistent with a 0.15 lb/MMBtu combined limit would be insignificant from a visibility standpoint. Further, we note that the annual NO_x BART limit of 0.15 lb/MMBtu is below the average actual emissions of 0.16 lb/MMBtu for Units 1 and 2 between January and October 2010.¹² Therefore, Colorado imposed an annual emission limit that was lower than the then most recent partial-year figures for Units 1 and 2.

The commenter also argues that the 30-day rolling average limits of 0.20 lb/MMBtu would allow emission increases because the actual 30-day rolling average rates have consistently been below this number. Annual emissions are controlled by the SIP’s limit of 0.15 lb/MMBtu

NO_x ... from a source, it is unlikely to result in anything but a trivial improvement in visibility. This is because reducing emissions at these levels would have little effect on regional emissions loadings or visibility impairment.” 70 FR at 39117.

¹¹ See Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, at 2, Table 1: Comanche Units 1 and 2 Technical Information (EPA-R08-OAR-2011-0770-0013, PDF page 297 (citing boiler ratings of 3,531 MMBtu/hr for Unit 1 and 3,482 MMBtu/hr for Unit 2).

¹² January–October 2010 is the most recent annual average emission rate period discussed by Colorado in the regional haze SIP. See *id.* at 18 (PDF page 313).

for the average of the two unit's annual average emission rates, and would be so controlled even if there were no 30-day limits at all. The issue of whether the State and EPA correctly assessed how well the annual limit will control annual emissions was addressed above. Therefore, EPA understands that this comment regarding the 30-day limits of 0.20 lb/MMBtu is meant to address the possibility that the emission rate of one or both units in 30-day periods may be higher than 0.15 lb/MMBtu, while the source could still comply with respect to the annual average limit by having lower emissions in other 30-day periods. EPA agrees that this is possible, but the State modeled the baseline visibility impact of the source assuming a constant emission rate of 0.20 lb/MMBtu, so the possibility has been fully considered.

For these reasons, we have determined that while the State could have better explained the basis for the margin for compliance it allowed, a more robust analysis would not have led it to reach a different conclusion as to the NO_x emission limits for Comanche Units 1 and 2. In its next regional haze SIP, the State can review the longer history of emissions from Comanche that will be available then, and consider whether a downward adjustment in the emission limit is appropriate to ensure the best possible operation of the emission controls.

Comment: The commenter asserts that the State failed to appropriately assess the cost of SCR, by assuming that SCR would achieve an emission rate of 0.07 lb/MMBtu on an annual average basis. But, according to the commenter, EPA has noted that SCR can achieve emission rates as low as 0.04 lb/MMBtu on an annual basis, and a 0.05 lb/MMBtu emission rate on an annual average basis is a more appropriate benchmark from which to assess the cost-effectiveness of SCR. The commenter claims that because the State did not assess the cost-effectiveness of SCR based on a rate of 0.05 lb/MMBtu, the State did not reasonably take into account the cost of compliance with SCR in accordance with the CAA. The commenter adds that

although EPA and the State may claim that SCR would not be cost-effective in any case, there is no support for such an assertion, and without an adequate case-specific cost analysis, there is no support for concluding that SCR is unreasonable, particularly for Unit 2.¹³

Response: We disagree with this comment. We have reviewed the information in the administrative record for this action again, and we find that our previous conclusion is still correct. We agree that SCR can achieve annual NO_x emission rates of 0.05 lb/MMBtu, and that ideally Colorado would have used this value when assessing the SCR control option.¹⁴ But if the State had done so, the marginally lower emissions would not have caused the State to reach a different conclusion as to what technology is BART.

First, we note that the comment misstates the rate that Colorado actually used for the purpose of calculating cost-effectiveness. In the Comanche NO_x BART analysis, the State assumed an annual emissions rate for SCR of 0.061 lb/MMBtu — not 0.07 lb/MMBtu.¹⁵ (The latter figure was the 30-day rolling average rate, not the annual average as the commenter contends.¹⁶) Therefore, the relevant comparison for the commenter's purpose would be between the 0.061 lb/MMBtu annual average rate that the State used and the 0.05 lb/MMBtu annual average emission rate that the commenter prefers.

¹³ Guardians' Comments at 9.

¹⁴ Throughout this notice, our references to the use of SCR at Comanche incorporate the effects of LNB/OFA. Thus, when we discuss comparing the effects of SCR against the baseline, we are comparing SCR operating with LNB/OFA against the post-2009 baseline of LNB/OFA alone.

¹⁵ See Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, Tables 10 and 11, at 20–21 (R08-OAR-2011-0770-0013, PDF pages 315–16; see also Technical Support Documents for BART Determination (EPA-R08-OAR-2011-0770-0017), Attachment: Public Service Company - Comanche Station, Units 1 and 2 Technical Analysis (.xls format spreadsheet file, tabs "Comanche 1 NO_x" and "Comanche 2 NO_x"). There is an inconsequential (approx. 0.33%) difference between the Unit 1 baseline numbers in these two parts of the record; the discussion in this rule uses the 1506 tpy figure from the State's technical analysis spreadsheet.

¹⁶ *Id.*

Using the 0.061 lb/MMBtu annual average emission rate, Colorado estimated emissions of 740 tpy for Unit 1 and 869 tpy for Unit 2 with SCR.¹⁷ Based on those estimated emissions, the State calculated emission reductions of 770.4 tpy for Unit 1 and 1,480 tpy for Unit 2, compared to a baseline level of emissions measured in 2009 that reflected the installation of LNB/OFA controls.¹⁸ Based on these reductions, the State derived cost-effectiveness values for SCR of \$15,920 per ton and \$9,900 per ton for Units 1 and 2, respectively.¹⁹ It is a simple exercise to insert the annual average emission rate of 0.05 lb/MMBtu into the State's technical analysis spreadsheet.²⁰ Doing so, we can see that using the figure the commenter recommends would have produced estimated emission levels of about 609 tpy for Unit 1 and 713 tpy for Unit 2 with SCR, which in turn give emission reductions of 897 tpy (Unit 1) and 1,636 tpy (Unit 2) compared to a 2009 baseline level and cost-effectiveness values of \$13,670 and \$8,956 per ton for Units 1 and 2, respectively.²¹ Considering that these adjusted cost-effectiveness values remain high and (as discussed below) the extent of the benefits associated with SCR remains low, we do not believe that the impact on the BART analysis would have led to a different conclusion if Colorado had used the more stringent emission rate. Therefore, we conclude that

¹⁷ *Id.*

¹⁸ “[T]he Division used years 2009 (annual averages and 30-day rolling) for baseline emissions for reduction and cost calculations.” Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, at 3 (R08-OAR-2011-0770-0013, PDF page 298); *see also id.*, Table 2 (“PSCo Comanche Units 1 & 2 Baseline Emissions”).

¹⁹ *See* Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, Tables 10–13, at 20–21 (R08-OAR-2011-0770-0013, PDF pages 315–16).

²⁰ *See* Technical Support Documents for BART Determination (EPA-R08-OAR-2011-0770-0017), Attachment: Public Service Company - Comanche Station, Units 1 and 2 Technical Analysis (Excel spreadsheet file, tabs “Comanche 1 NO_x” and “Comanche 2 NO_x”).

²¹ For Unit 1, the State also calculated an incremental value to assess the cost-effectiveness of SCR over SNCR. Even after making the correction to an assumed annual average rate of 0.05 lb/MMBtu as described above, this value remains very high: \$23,497 per ton.

the State's use of 0.061 lb/MMBtu to evaluate the cost-effectiveness of SCR at Comanche is not grounds for disapproval.

Comment: The commenter states that Colorado appears to have overestimated the capital cost of SCR, in that the State's reliance on the CUECost model led to artificially inflated capital costs. According to the commenter, both EPA and the National Park Service (NPS) previously commented to the State that the State should have used EPA's Control Cost Manual, and both noted that the CUECost model relied upon by the State is not appropriate. The commenter argues that the State does not explain in the record why its use of CUECost was reasonable, particularly in light of the concerns expressed by EPA and the NPS.²²

Response: We agree that there were flaws in Colorado's approach to estimating the costs of SCR for the Comanche BART units, and that the CUECost model likely yielded an inflated cost estimate. In the referenced correspondence, EPA stated that "the CUECost model yields high capital costs for the Comanche facility," and suggested that the capital costs calculated would have been approximately 50% lower if the CCM had been followed.²³ But even if we reduce the capital cost estimates by that percentage, and also adjust the emission rate as discussed in the previous comment, we believe that the cost of SCR at Comanche would still be high compared to the visibility benefits, and that Colorado's decision not to require SCR would still be reasonable.

Specifically, cutting the capital cost estimate by 51.6%, and using the more stringent 0.05 lb/MMBtu emission rate discussed in the previous comment, produces cost-effectiveness

²² Guardians' Comments at 9.

²³ Letter from Callie Videtich, EPA, to Paul Tourangeau, CDPHE (Oct. 26, 2010), at 8–9 (EPA-R08-OAR-2011-0770-0043, Attachment 19). EPA stated that using the CCM to assess SCR capital costs for the Comanche BART units yielded an estimate of approximately \$120/kW, as opposed to the \$247/kW (Unit 1) and \$248/kW (Unit 2) derived from the CUECost model. *Id.* This ratio of dollars per kW results in a 51.6% lower estimate.

values of \$9,319 and \$6,481 per ton for employing SCR at Units 1 and 2, respectively.²⁴ Thus, even after addressing both of the cost issues raised by the commenter, the cost-effectiveness values remain high. Also, as discussed below in response to another comment, we have concluded that the visibility benefits that would result from SCR are insufficient to justify these high costs. Accordingly, we do not believe that Colorado would have reached a different NO_x BART conclusion if it had used the CCM in its analysis (as well as the more stringent emission rate discussed previously).

In its SIP, the State explained that, in its view, SCR for NO_x control would generally be reasonable if costs did not exceed \$5,000 per ton of pollutant reduced, and if the controls provided a modeled visibility benefit of 0.50 deciviews (dv) or greater at the primary Class I Area affected.²⁵ Considering the State's guidance, it is clear that making the adjustments that the commenter requests would not lead to a different outcome. Therefore, considering all the BART factors, we do not see a basis to conclude that using a lower capital cost estimate, combined with a 0.05 lb/MMBtu emission rate for SCR, would have led the State to reach a different conclusion or should lead us to disapprove the State's BART determination.

Comment: The commenter states that Colorado and EPA may claim that, even if the costs were accurately assessed, the visibility benefits of SCR would not be significant, but that there is no support for this assertion. According to the commenter, it appears that Colorado's assessment of visibility improvements is based on an assumption that the proposed BART

²⁴ The 51.6% adjustment to capital cost can be made by multiplying the "total capital costs" figures on the State's technical analysis spreadsheet by 0.484. See Technical Support Documents for BART Determination (EPA-R08-OAR-2011-0770-0017), Attachment: Public Service Company - Comanche Station, Units 1 and 2 Technical Analysis (.xls format spreadsheet file, tabs "Comanche 1 NO_x" and "Comanche 2 NO_x"). In addition to capital costs, the cost-effectiveness calculations incorporate operating and maintenance costs, which the commenter did not challenge.

²⁵ See Colorado Regional Haze Submittal at 52 (R08-OAR-2011-0770-0013, PDF page 53).

limits, which the commenter refers to as the “do nothing” BART limits, would actually improve visibility. But, the commenter claims, the proposed BART limits would allow increased emissions, and therefore would not improve visibility. On the other hand, states the commenter, SCR would appear to provide significant visibility improvements. The commenter argues that for Unit 2 this is especially significant because SCR was the only available technology analyzed for BART.²⁶

Response: We disagree with this comment. In relation to the high costs, the visibility benefits of SCR at Comanche are not sufficiently large to warrant disapproval of the State’s BART determination. We would come to this conclusion regardless of whether the cost component of the BART analysis involved the State’s original figures or the adjusted figures discussed above in response to previous comments. The State estimated that SCR would produce visibility improvements of 0.14 dv (Unit 1) and 0.17 dv (Unit 2) as compared to the 2009 post-LNB/OFA baseline.²⁷ This level of expected visibility improvement from SCR is insufficient to cause us to conclude that the State’s BART determination is unreasonable.

As discussed above in response to a previous comment, we recognize that the State did not use the 0.05 lb/MMBtu emission rate that accurately represents the performance capabilities of SCR. Accordingly, it is reasonable to expect that the State would have estimated slightly greater visibility benefits from SCR if it had used the 0.05 lb/MMBtu rate. In EPA’s judgment, however, the visibility benefits compared to the 2009 baseline would have remained modest. We note, for instance, that in the State’s analysis of Comanche Unit 1, the difference in visibility

²⁶ Guardians’ Comments at 9-10.

²⁷ See Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, Table 15, at 24 (R08-OAR-2011-0770-0013, PDF page 319). As discussed below, the table also includes information on improvements over the pre-control baseline; this information is illustrative and was not the basis for the BART determination or for our approval of the State’s action.

benefit between selective non-catalytic reduction (SNCR) (with a NO_x emission rate of 0.10 lb/MMBtu) and SCR (with a NO_x emission rate of 0.07 lb/MMBtu) is only 0.03 dv.²⁸ We conclude that the impact of a further reduction in emission rate to 0.05 lb/MMBtu would be similarly small.²⁹

As mentioned previously, the State explained that, in its view, SCR for NO_x control will generally be reasonable when costs do not exceed \$5,000 per ton of pollutant reduced, and when the controls provide a modeled visibility benefit of 0.50 dv or greater at the primary Class I Area affected.³⁰ While we agree with the State that these guidance criteria should not be used as absolute determinants of BART outcomes, they are in general consistent with the decisions that other states and EPA have made when considering whether to require SCR as NO_x BART, and generally reflect a reasonable balancing of the BART factors. In this case, we expect that even using the SCR emission rate requested by the commenter, the visibility improvement from SCR would fall well below the State's criteria. Judging these visibility improvements against the fairly high cost of SCR (again, even after adjustment to reflect the comments), we find that the State's decision not to impose SCR was reasonable.

²⁸ What are labeled by the State as "NO_x emission rates" (e.g., Table 15 of their analysis) are actually the 30-day emission limits. See Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, Table 15, at 24 (R08-OAR-2011-0770-0013, PDF page 319). Actual 30-day emission rates have been lower. See *id.* at 18 (PDF page 313).

²⁹ Thus, comparing the SNCR and SCR numbers, we see that a NO_x emissions rate reduction from 0.10 to 0.07 lb/MMBtu is reflected in a visibility improvement from 0.11 to 0.14 dv. If we assume, for the purpose of conservatively estimating visibility improvements, that there is a linear relationship between emission reductions and visibility improvement, then further reducing the NO_x emission rate from 0.07 to 0.05 lb/MMBtu might cause visibility improvements at Units 1 and 2 to increase from 0.14 and 0.178 dv to approximately 0.16 and 0.198 dv. See Approval and Promulgation of Air Quality Implementation Plans; State of Florida; Regional Haze State Implementation Plan, 78 FR 53250, 53267 (Aug. 29, 2013) ("[A]n assumption of a linear response to changes in emissions is a reasonable estimation and the simplified methodology used for these BART determinations likely provides conservative overestimates of visibility impact reductions.").

³⁰ See Colorado Regional Haze Submittal at 52 (R08-OAR-2011-0770-0013, PDF page 53).

The commenter incorrectly asserted that the State's BART determination was based on the assumption that existing controls would improve visibility compared to current levels. Colorado did not claim that its BART emission limits would result in visibility benefits compared to current levels (that is, compared to the 2009 post-LNB/OFA emissions baseline). The State did note that the existing level of control provided benefits when compared to the 2004 baseline, which is true. But while Colorado referred to both a pre-LNB/OFA baseline and a 2009 baseline when discussing visibility benefits, the State actually used only the 2009 baseline in calculating cost-effectiveness, and likewise relied on visibility benefits based on the 2009 baseline in making the BART determination for Comanche.³¹ We have reviewed the visibility estimates and cost calculations that the State relied on when making its BART determination for Comanche and have confirmed that they were based on comparisons to the 2009 baseline.³²

It was correct for the State to use the 2009 baseline for NO_x emissions from Units 1 and 2 in the BART determination. The CAA requires that, in making BART determinations, states

³¹ Colorado stated in the SIP that "the Division used year[] 2009 (annual averages and 30-day rolling) for baseline emissions for reduction and cost calculations." *See* Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, at 20–21, 24 (R08-OAR-2011-0770-0013, PDF pages 315–16, 319); *see also* Appendix C — Technical Support Documents for BART Determination (EPA-R08-OAR-2011-0770-0017), Attachment 5: Public Service Company — Comanche Station Units 1 and 2 Technical Analysis. Likewise, the State's BART determination cites only the 0.14 dv and 0.17dv visibility improvement numbers derived from comparison to the 2009 baseline. *See* Colorado Regional Haze Submittal at 66 (R08-OAR-2011-0770-0013, PDF page 67).

³² In replying to this comment and one other comment in the December 2012 final approval, we inadvertently made a confusing statement concerning the applicable baselines. In that notice, we stated that Colorado had "assessed the benefit of control options relative to both the subject-to-BART baseline and to the installation of new low- NO_x burners (LNB) [with over-fire air] in 2007 and 2008." Further, we noted that "relative to the subject-to-BART baseline, Colorado's BART selection (combustion controls), does in fact show visibility improvement." These statements appeared to suggest that it was appropriate for Colorado to use a 2009 baseline when evaluating the benefits of SNCR and SCR, but a 2004 (pre-LNB/OFA) baseline to evaluate the State's proposed BART option. That was not our intention. Our reference to the 2004 subject-to-BART baseline — that is, to the emissions level before the installation of the LNB/OFA, which were required to comply with non-BART CAA requirements — was merely an observation, by which we intended to show that the installation of those controls had produced real air quality improvements over previous levels. That illustration was not, however, intended to be part of our evaluation of the State's cost or visibility analyses.

and EPA take into consideration “any existing pollution control technology in use at the source.”³³ As we explained in detail in our final action on the Wyoming regional haze SIP, this consideration should generally incorporate controls into baseline emissions if the controls were installed to comply with CAA requirements *other than the BART requirement*.³⁴ That is exactly what happened with respect to Comanche Units 1 and 2. The controls in question had been placed on these units to “net out” of Prevention of Significant Deterioration (PSD) review requirements for NO_x and SO₂ emissions from the new Unit 3.³⁵ Therefore, it was appropriate for the State to use the 2009 emissions baseline, which reflected the reductions achieved by LNB/OFA, in its BART analysis for Comanche.

Finally, we addressed the assertion that the State’s BART limits would lead to increased emissions in our response to a previous comment. The commenter has failed to offer any support for this claim, and we do not find any basis to conclude that increased emissions will result from the State’s BART limits.

For the above reasons, while we agree that SCR at Comanche Units 1 and 2 would result in visibility improvements, we find that the State reasonably concluded that those visibility improvements would not be sufficient to justify the cost involved.

Comment: The commenter states that it is unclear why Colorado rejected SNCR for Comanche Unit 1, particularly because the proposed BART limit for Unit 1 is less stringent than Unit 1’s current actual emissions. Citing EPA figures, the commenter asserts that Unit 1 would

³³ 42 U.S.C. 7491(g)(2).

³⁴ 79 FR 5032, 5104–05 (Jan. 30, 2014).

³⁵ See Colorado Regional Haze Submittal, Appendix C (Technical Support Documents for BART Determination), BART Analysis of Control Options For Public Service Company — Comanche Station, Units 1 and 2, at 1 (R08-OAR-2011-0770-0013, PDF page 1) (“As part of that [2004 construction] project, PSCo proposed to install control devices on the existing units.”); see also Colorado Operating Permit # 96OPPB133 (Comanche Station) (“...PSCo proposed to install NO_x controls (low NO_x burners with over-fire air) on both Units 1 and 2 ... to ‘net-out’ of Prevention of Significant Deterioration (PSD) review requirements for NO_x and SO₂”), posted at <https://www.colorado.gov/pacific/cdphe/operating-permits-company-index>.

meet a 30-day rolling average emission rate of 0.10 lb/MMBtu under an SNCR scenario. The commenter notes that the State found that the cost of \$3,644 per ton of NO_x reduced and the perceived “low visibility improvement” warranted a determination that SNCR was not reasonable for Unit 1. The commenter asserts, however, that this cost is squarely within the range of what Colorado considers to be cost-effective.³⁶

Response: We find that the State’s rejection of SNCR was reasonable based on its weighing of the BART factors. The State concluded that the cost of SNCR was not warranted given the relatively modest 0.11 dv visibility improvement that would result. Even if a control technology is cost-effective on a dollar per ton basis, a state may conclude that the control technology is not warranted based on a reasonable consideration of all five BART factors.

Comment: The commenter states that Colorado’s analysis indicates that SNCR would achieve greater emission reductions than an emission rate of 0.20 lb/MMBtu on a 30-day rolling average. According to the commenter, although the State asserts that the visibility improvement from SNCR would amount to 0.11 dv, it is unclear why such improvements are not reasonable or are insignificant, particularly given that the purpose of BART is to reduce or eliminate visibility impairment. The commenter argues that there is no explanation in the record supporting the State’s assertion. Further, the commenter argues that it appears as if the State’s assessment of visibility improvements is based on an incorrect assumption that the proposed BART limit would actually improve visibility. The commenter states that when compared to the real impacts of the State’s proposed BART limit for Comanche Unit 1, SNCR appears to provide significant visibility improvements, because, as opposed to the proposed BART limit,

³⁶ Guardians’ Comments at 10.

SNCR would actually achieve improvements. Therefore, the commenter concludes, EPA must promulgate a FIP that establishes an appropriate NO_x BART limit for Comanche Unit 1.³⁷

Response: The commenter is correct that the State predicted that SNCR would result in additional improvement in visibility over the control technology that the State selected as BART. However, this does not mean that the CAA or our regulations required the State to select SNCR as BART. For the reasons stated above, we find that it was reasonable for the State to reject SNCR based on consideration of all five BART factors. We agree that SNCR would result in visibility improvements, but as with SCR, we agree with the State's assessment that the visibility improvements were insufficient to justify the cost involved.

Regarding the commenter's claim that the State's selected limits will lead to an increase in emissions, as discussed above in detail, the commenter has presented no evidence that any emissions increase will occur.

III. Final Action

With respect to the Comanche Station, EPA is re-finalizing its approval of the Colorado regional haze SIP submitted on May 25, 2011. Because this re-finalization merely gives additional explanation in response to comments and does not alter any previous determinations, it does not affect any applicable SIP compliance deadlines. Our action is based on an evaluation of Colorado's regional haze SIP submittal for Comanche against the regional haze requirements at 40 CFR 51.300–51.309 and CAA sections 169A and 169B. All general SIP requirements contained in CAA section 110, other provisions of the CAA, and our regulations applicable to this action were also evaluated. The purpose of this action is to ensure compliance with these requirements and to provide additional rationale to support our conclusions.

³⁷ Guardians' Comments at 10.

IV. Incorporation by Reference

In this rule, the EPA is finalizing regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is finalizing the incorporation by reference of Colorado revisions to its SIP to address the requirements of EPA's regional haze rule discussed in section III, Final Action, of this preamble. The EPA has made, and will continue to make, these documents generally available electronically through www.regulations.gov and/or in hard copy at the appropriate EPA office (see the ADDRESSES section of this preamble for more information).

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 USC 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 USC 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 USC 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 USC 272 note) because this action does not involve the use of measurement or other standards; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).
- The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to

publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [**Insert date 60 days after date of publication in the Federal Register**]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. See section 307(b)(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Sulfur oxides.

Dated: May 8, 2015.

Debra H. Thomas,
Acting Regional Administrator
Region 8

40 CFR part 52 is amended as follows:

PART 52 – APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart G – Colorado

2. Section 52.320 is amended by revising paragraph (c)(124) introductory text to read as follows:

§ 52.320 Identification of plan.

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(c) * * *

(124) On May 25, 2011 the State of Colorado submitted revisions to its State Implementation Plan to address the requirements of EPA’s regional haze rule. On December 31, 2012, EPA issued a final rule approving this submittal and responding to public comments. On **[Insert Federal Register date of publication]** EPA reissued the final rule with respect to the nitrogen oxides (NO_x) best available retrofit technology (BART) determination for the Comanche Generating Station to provide additional responses to public comments.

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[FR Doc. 2015-12491 Filed: 5/22/2015 08:45 am; Publication Date: 5/26/2015]